

Major Salmon King County Habitat Restoration and Recovery Projects

Ballard Locks Fish Passage Improvements

A combination of capital improvements to reduce injury to juvenile salmon and steelhead swimming out to Puget Sound. This project is expected to increase the survival of juvenile salmon from the Cedar/Sammamish watershed by at least 20% -- and more in dry years (when the spill gates must be closed longer to maintain lake levels).

O'Grady Park Stream Reconnection

Phase 1 of this project involves restoring 1,200 feet of stream channel along the lower reaches of a small tributary to the middle Green River within O'Grady Park. Access to the upper reaches of a small tributary to the upper reaches of the stream have been improved through construction of a log and rock fishway to provide access to the stream's upper 1.3 miles. Large woody debris has been placed throughout the rebuilt stream, and the riparian zone above the culvert has been replanted.

This small tributary in O'Grady Park has been rechannelized at least three times in the last 75 years, resulting in an unstable connection to the Green River. High sediment loads regularly inundate the stream, causing abandonment of the channel, and the stream becomes ill-defined, sometimes infiltrating into the delta soils rather than connecting with the Green River. The reconstructed channel (Phase 2 of this project) has been scheduled to be constructed in spring of 2000. The restored channel would follow a more natural course across the alluvial fan to the river (approximating the stream's original course), and has been designed to accommodate high sediment loads while still remaining passable. Improving stream conditions here would improve access to spawning and rearing habitat for coho, steelhead, and sea-run cutthroat trout.

Porter Levee

This project involves purchase of a 30-acre parcel adjacent to the Green River on the left bank just upstream of the Highway 18, and restoration of the river's connection to an isolated side channel. The side channel has been connected by excavating a notch in the Porter Levee at the downstream end of the project site, and excavating a channel connection with a possible control weir and log and rock fishway. An upstream has been made to provide flow-through. The side-channel has been enhanced through the addition of snags and other habitat features, and the entire site has been replanted with native riparian and wetland vegetation. This reconnection re- establishes fish access to an 8-acre side channel, and enhances 13 additional acres of riparian wetland.

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Comprehensive Sammamish River Water Quality/Habitat Restoration

This is a set of projects, including a major restoration project just downstream of the Lake Sammamish Weir and removal of several "hanging" culverts so that fish have access to former spawning habitat. The banks of the river will be terraced following the removal of invasive Himalayan blackberries and reed canary grass, whereupon thousands of volunteers will help plant the banks with native trees and shrubs. As the native plantings grow, they will provide shade and habitat along the river.

Issaquah Creek East Lake Sammamish Waterways 2000 Program

This project will enhance fish and wildlife habitat and provide educational, scenic, and recreational opportunities along Issaquah Creek from its mouth to the headwaters. The proposal includes habitat acquisition and enhancement projects, and incentives to landowners for conservation easements. This proposal will build on the 1998 Issaquah Creek Waterways 2000 program. A Basin Team, composed of local citizens and staff from King County and the City of Issaquah, has been formed and has identified streamside habitat and forested uplands for protection.

Cedar River - Belmondo Reach

This project includes acquisition of approximately 1 mile of the most extensive and unconfined reach of the Cedar River. Located between Jones Road and Cedar Grove Road, this site features multiple river channels, forested floodplain, gravel valley walls, high quality off-channel spawning areas and rearing habitat associated with adjacent wetlands. This section of the river is heavily used by chinook, sockeye, coho, steelhead, and cutthroat trout. This is an important area for mainstem river and floodplain processes, including recruitment, capture and storage of large trees, sediment storage and accumulation, and side channel formation. The entire reach is located adjacent to the Cedar River Regional Trail and will enhance the passive recreational values of the Trail.

Diking District 6 Project: Snohomish River Estuary

The overall goal of this project is to preserve and restore rearing and refuge habitat for chinook salmon and other fish species in the Snohomish River Estuary. The project involves acquisition of approximately 341 acres of diked floodplain along the lower Snohomish River. This site provides opportunities for restoration of tidal influence and addition of chinook salmon rearing habitat. During the restoration phase of this project, the county will construct a new setback dike and breach a portion of the existing dike to restore tidal influence and access to approximately 233 acres of the lower Snohomish River floodplain for Chinook rearing. The project also includes planting wetland and riparian vegetation and on-going monitoring.

Griffin Creek Habitat Restoration Project

Griffin creek is a tributary to the Snoqualmie River located just south of the City of Carnation. Griffin Creek contributes more coho salmon than any other tributary in the Snohomish Basin. The vast majority of the headwaters for this basin is in forestry use, and the lower reaches of the creek in that pass through the Snoqualmie River floodplain are in agricultural use. Griffin Creek Basin is one of the original target basins for the Waterways

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2000, and the county has purchased 74 acres and placed them in permanent protection. The Griffin Creek restoration project is focused on the lower reaches of Griffin Creek, where it passes through farmland. The project is intended to demonstrate how habitat can be enhanced and restored while active agricultural uses continue. The project includes:

- installation of large logs and root wads to create pools and provide cover for salmon,
- revegetation of the stream corridor to project shade and cover,
- fencing of cattle away from the stream to prevent bank trampling and reduce water quality, and
- construction of a berm to reduce fish stranding and reduce ponding in pasture areas.

The project is being carried in cooperation with landowners, Washington Trout, and Jobs for the Environment. To date, the project partners have restored 350 feet of streambank using bioengineering techniques, installed 35 pieces of large woody debris, relocated livestock fencing that had been repeatedly washed out by floods, installed of-channel livestock watering systems, and replanted 1000 feet of stream buffer using volunteer labor. Construction on the second phase of the project is being wrapped up this week, with funding support from state habitat restoration funds.

Other ESA and Salmon Recovery Related Activities

Integrated Pest Management and Pesticide Reduction Executive Order

At the direction of King County Executive Ron Sims, King County agencies are implementing a strategy to eliminate use of the most hazardous pesticides by June 2000 and to reduce overall pesticide use on public lands managed by the county. This will be accomplished through the use of Integrated Pest Management (IPM). IPM is a holistic approach to pest (including weed) management. IPM stresses the prevention of pest problems through design and maintenance practices, and uses a range of pest management techniques, including biological, cultural, and mechanical, with chemical controls as a last resort.

Roads Best Management Practices

The King County Roads Division is implementing new Best Management Practices (BMPs) for roads maintenance activities. These BMPs will decrease negative impacts to salmon by improving ditch dredging practices, vactoring waste from eatch basins, using environmentally friendly striping products, and a variety of other changes to paving practices.

Wastewater HCP

The Wastewater Treatment Division will prepare a Habitat Conservation Plan to identify long-term measures it must take in order to conserve species protected under the Endangered Species Act. The HCP will be prepared in two or more phases and will address multiple species, included listed and candidate species. The first phase of the HCP, scheduled for completion by the end of 2002, will address siting and construction of the new North Treatment Facilities as well as operation and maintenance of existing

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wastewater facilities. The HCP will result in a long-term agreement with the National Marine Fisheries Service and the U.S. Fish & Wildlife Service.